

SALVAGE EXCAVATION OF AN ARCHAIC BURIAL CONTEXT, N44/97, HAHEI

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Abstract. Following the recent discovery of an archaic burial with grave gifts and seemingly associated working-floor at Hahei Beach, a small rescue excavation was conducted at N44/97. The extant stratigraphy and artifactual material from the site are described and compared to similar working-floors exposed *in situ* on neighbouring allotments.

In December 1975, the elements of an unusually rich archaic burial were discovered together with an equally early occupation floor on the property of Mr. and Mrs. B. Phillips at 19 Wigmore Road, Hahei, on the Coromandel Peninsula.

The finds comprised human remains (a cranial fragment, three vertebrae and several phalanges), two necklaces made of Sperm whale-ivory (a total of twenty-one reel units and two whale-tooth pendants), a *Carcharodon* shark-tooth pendant, a fragment of an unfinished, one-piece fish-hook, three siliceous drill points, a sandstone file fragment and a dog's tooth (see Figs. 36-48) — all within an area of 2-3 m².

Distributed over a wider area of approximately 150 m², other objects, derived from the occupation floor, comprised several fragments of an unidentified moa species, a shaft fragment of *Dinornis* sp. and the bones of seal and fish. Also collected were a number of obsidian flakes (grey and green), Tahanga basalt and siliceous flakes, an argillite flake and burnt haangi stones.

Details of site N44/97 were reported by Mr. J. D. Osborne of Howick and Mr. and Mrs. B. Phillips kindly presented the finds to the Auckland Institute and Museum. The site was inspected by Lady Fox, acting E. E. Vaile Archaeologist, upon whose recommendation it was decided to conduct, with the approval of the Archaeology Committee, Historic Places Trust, a small rescue excavation on behalf of the Museum.

SITE LOCATION AND HISTORY

Situated on the east coast of Coromandel (Fig. 1 — inset), between Cook's Beach and Hot Water Beach, Hahei shares the general physiographic characteristics of the peninsula's exposed ocean beaches. Typical are the long, sweeping, sandy beach between high headlands, extensive dune sands several metres a.s.l., streams at both ends of the beach, low-lying, formerly swampy hinterland and light, loamy soils on the valley floor margins. Immediately offshore, there are two small islands and several islets,

From the viewpoint of subsistence economics, such locations with their pronounced microenvironmental diversity and variety of food resources available within a short

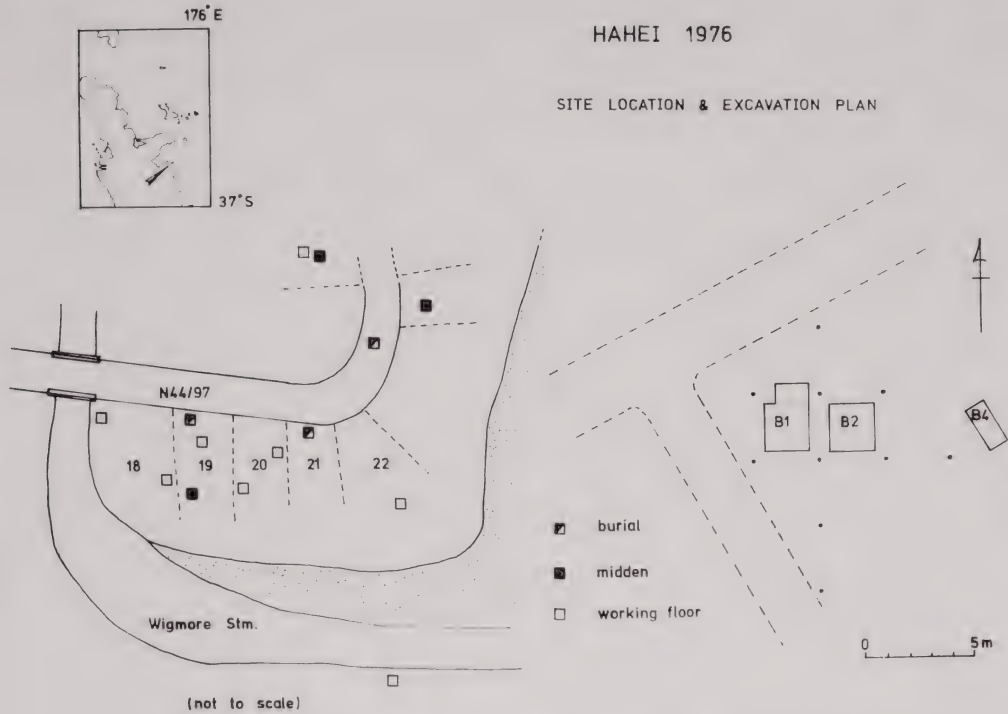


Fig. 1. Plan showing the location of N44/97 and neighbouring sites

compass are highly favourable for settlement. Indeed, the distribution of early Archaic sites on Coromandel's East Coast is a direct expression of a marked preference for the exploitation of such areas.

Arawa and Ngatihei tradition, together with historical sources, would ascribe a lengthy (if somewhat turbulent) period of occupation to Hahei. The assemblage of late artifacts, provenanced to a midden on the headland pa, N44/7, and assigned to the Classic Period by Green (1963, p. 67) together with Moore's survey of the field evidence (Moore 1976a, p. 147) point to the area's significance late in Prehistory. Until recently, there has been little evidence recorded for the area's early exploration and primary settlement. Some idea of time-depth for the latter is provided by the fairly high incidence of archaic adzes in the Harsant Collection and Moore's observations on the dominance of Tahanga Basalt in the lithology of localised adzes (Moore 1976b, p. 83).

N44/97 is located at the southern end of Hahei Beach on consolidated dunes between the sea and the Wigmore Stream. The former lies some 200 m to the east and the stream some 50 m to the west and south (Fig. 1). It is one of several sites to have been recently revealed as the result of coastal subdivision and service road construction for holiday homes — a process which was initiated in 1963.

When the Wigmore Road was first constructed, in 1970, two burials (both unrecorded) were exposed. The first was found beneath a 2 m-deep overburden of sand some 60 m north-east of N44/97 and the other on the roadside verge of Lot 21 some

30 m east of the latest burial. Both of the 1970 burials were re-interred. Restructuring of the road in 1975 resulted in the exposure of the burial belonging to N44/97.

EXCAVATION

Excavation took place between April 26-30, 1976. The immediate objective was to recover and record the extant stratigraphic context of the burial with its grave gifts. A grid was established at the roadside front of Mr. Phillips' property, Lot 19 Wignore Road, with pegs A - E along the N/S axis and pegs 1 - 4 on the E/W axis at 3 m intervals. Three squares (B1, B2 and B4) were excavated providing a total excavated area of 11.5 m² (Fig. 1). Lots 20 and 18 were also examined.

STRATIGRAPHY OF B1

The stratigraphy of B1 was established as follows (Fig. 2).

- Layer I* — Topsoil of yellow clay and humus substituted by light-grey, wind-blown sand in the northern half of the square.
- Layer II* — Loose, grey sand containing decaying vegetable matter (lupin, inkweed and fern roots, lupin seeds etc.) and the shells of several species of dune-dwelling land snails. Lower horizon more compacted than upper.
- Layer III* — Light, yellow-brown sand (compacted when wet) with discontinuous, charcoal lenses.
- Natural* — Clean, yellow sand.

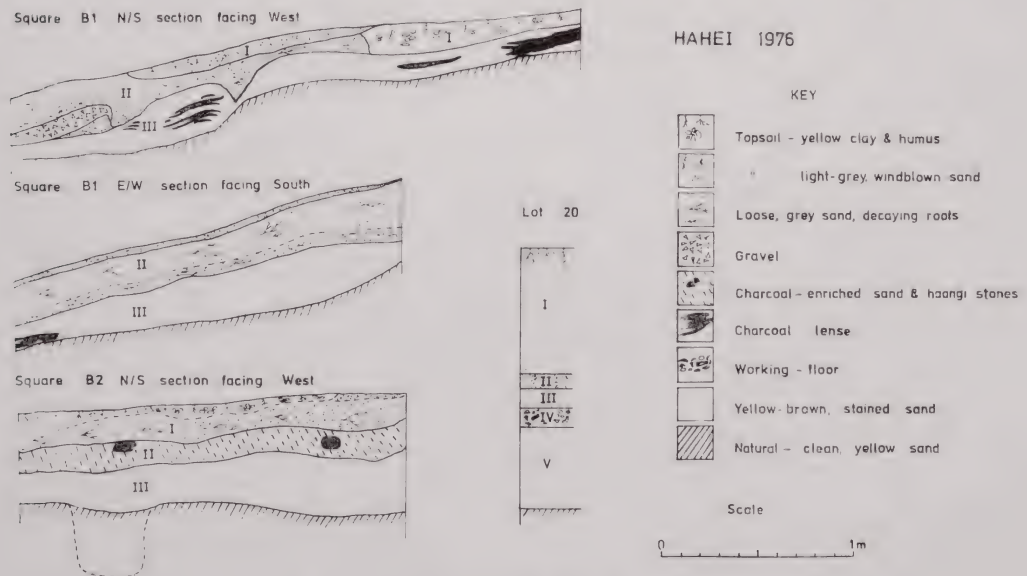


Fig. 2. Principal cross-sections, N44/97.

Layers I and II, while rich in artifacts (Table 1), were demonstrably recent. They post-dated a gravel spread of either builder's mix or roading metal located in B1's northern extension. However, a human phalange and carpal fragment recovered from Layer II are almost certainly derived from the burial. Only Layer III remained par-

tially intact. It appeared to be the basal stratum of an occupation floor upon which cooking and workshop activities (manufacture of adzes, drill points and working of bone and wood) were performed. No structural features were in evidence.

Table 1. Numerical distribution of artifacts by category and layer.

Distribution Layer	Surface	B1	B2	B4	L18	B1	B4	L20	B1	B2	B2	L18
	Lot 19 1975	I	I	I	I	II	II	[IV	III	undisturbed II	III	II
Argillite flake	1											
" " pol.		1										
Andesite fragment			2						2			
Basalt flakes	X	21	27	5		7	27	45	21	48	4	
" " pol.						1		1			1	
Basalt roughouts			2			2				3		
Siliceous core			1					1		1		
" flakes	X	5				2	14	10	4	12	4	
" drill points	3						1	2	1	1		
Greywacke flakes										2		
" " pol.	X							1				
Obsidian core	X											1
" flakes green	X	2	4	1	1	3	7	1	2	15		
" " grey	X	2	6	3		1	8	1	3	10		
Sandstone files	1							1		1		1
" hoanga		1					X		X			
Smoothing pebbles		X	X	X		X	X	X	X	X	X	
Pumice pebbles (wkd)			X			X		X				
Haangi stones	X	X	X				X		X			
Fish-hook tab	1				1							
Other worked bone	1	1						1		1		

(X = present)

It became apparent that the burial, with its grave gifts lying *in situ*, was derived from a context above present ground level, i.e. from the 1 m-high mound which was bulldozed to the southern end of Lot 19 in order to level the section and backfill the retaining walls at the front and to the west of Mr. Phillips' house. Further surface finds of a human vertebra and two rib fragments, besides the diffuse scatter of cultural material between the road front and the house, accord with this explanation.

In the hope that a more substantial part of the occupation floor could be recovered reasonably intact from the higher ground east of B1, a second square was excavated.

STRATIGRAPHY OF B2

Layer I — (upper horizon) — Topsoil as for Square B1 Layer I.

Layer I — (lower horizon) — Loose, grey sand with matted roots similar to B1 Layer II.

Layer II — Grey-black, charcoal-enriched sand, occasional lumps of charcoal and shattered haangi stones.

Layer III — Yellow-brown, stained sand merging into natural, yellow sand. Compacted when wet.

Layer I, again fairly rich in cultural material, was recent. Layer II, essentially a charcoal silhouette in keeping with the remains of an oven area exposed to weathering,

was found to be intact. Vertical streaks of charcoal-stained sand were probably the result of rain-water percolating through from the surface. Layer III was distinguished by its stained yellow-brown upper horizon (? percolating water again) for some 10-25 cm, within which the occasional stone flake was found, before merging into natural, yellow sand. A circular depression, the significance of which is not clear, had been cut into the natural. Containing a clean, white, sandy fill, it did not extend eastwards quite as far as the section but its position is indicated in Fig. 2.

A third, small square was excavated further to the east as a final check on the area.

STRATIGRAPHY OF B4

- Layer I* — Topsoil as for B1 and B2 *Layer I*.
- Layer II* — Mixed, yellow-brown sand.
- Layer III* — Dark, charcoal-stained sand and decomposing roots of dune vegetation.
- Natural* — Clean, yellow sand.

The fact that matted roots from clearly recent vegetation were found at different levels throughout *Layer III* (i.e. to a depth of 70 cm below present ground level) indicated that B4 had encountered the lip of a recently back-filled depression which is still extant on Lot 20 to the east.

At the conclusion of the excavation, Lots 20 and 18 (respectively east and west of N44/97) were examined. Of particular importance was the 2.80 m long, newly-exposed section on the eastern side of the driveway to Lot 20 (along the common boundary with Lot 21) for we believe it provides the key to understanding the extant stratigraphy of N44/97 (Fig. 2).

STRATIGRAPHY OF LOT 20

- | | |
|--|-----------------------|
| <i>Layer I</i> — Dune-sand with vegetation on surface, | depth of 65 cm |
| <i>Layer II</i> — Darker sand, | depth of 7 cm |
| <i>Layer III</i> — Light, sterile sand, | depth of 10 cm |
| <i>Layer IV</i> — Working-floor, | depth of 10 cm |
| <i>Layer V</i> — Stained, yellow-brown sand, | depth of 42 cm |
| <i>Natural</i> — Clean, yellow sand | Total depth of 1.34 m |

Artifacts from the working-floor (*Layer IV*) included numerous basalt and siliceous flakes, two flakes from polished basalt and greywacke adzes, two chert drill points, a few obsidian flakes and sandstone pebbles — material identical to that obtained from the excavation of N44/97 (Table 1).

Immediately west of the boundary shared by Lots 18 and 19, a drill point, the core of a fish-hook tab and several fragments of bone, including moa (species unidentified), were found on the surface beneath immature dune vegetation.

STRATIGRAPHY OF LOT 18

<i>Layer I</i>	— Loose, grey, wind-blown sand,	depth of 5 cm
<i>Layer II</i>	— Stained, yellow-brown sand,	depth of 65 cm
<i>Natural</i>	— Clean, yellow sand.	

A sandstone flint fragment was recovered from Layer II.

DISCUSSION

On the basis of the evidence provided by both the excavation of N44/97 and examination of the adjacent allotments 18 and 20, it is clear that, in the process of levelling Lot 19, the burial context and associated working-floor were almost completely destroyed. The mixed yellow-brown or stained sand, which occurs consistently throughout the area (B1 Layer III, B2 Layers II and III (upper horizon), Lot 18 Layer II, Lot 20 Layer V and possibly B4 Layer III) is the basal stratum of a spatially substantial occupation-floor. Of no great stratigraphic depth, the site's extant remains are confined to the boundary of Lots 20 and 21 (it may well continue into the latter) and close to the boundary of Lots 19 and 20 immediately west and north of the 3,000 gallon water-tank. It is impossible to determine whether the site formerly extended to the working-floors noted near the Wigmore Bridge and on Lot 22, or how it relates to N44/93 on the southern bank of the stream at this stage. Artifacts from these three working-floors do, however, closely resemble those of N44/97 both in form and material.

A wide range of industrial activities may be inferred from the artifactual evidence (Figs. 3-35). These include the fashioning and re-working of adzes (mostly of Tahanga Basalt), the manufacture of drill points (from massive cores of hard siliceous material) and one-piece fish-hooks, and other objects of bone and wood.

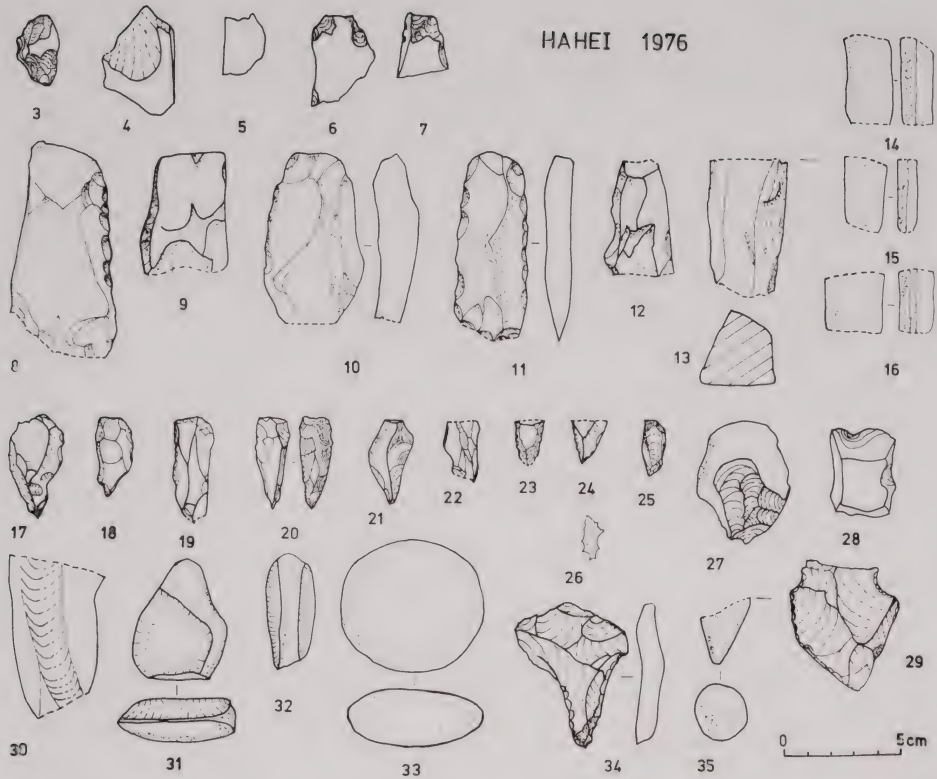
Insufficient midden material was recovered from N44/97 to enable a statement on the occupants' diet and economy (Table 2). In view of the site's recent history, this is not surprising. A small re-deposited shell midden, composed mainly of pipi and tuatua in a charcoal-enriched matrix, was noted at the southern end of Lot 19 but its derivation is unknown.

Two samples of charcoal-enriched sand (B2 Layers II and III interface, and B1 Layer III) have been submitted to the D.S.I.R., Lower Hutt for C¹⁴ determination.

THE GRAVE GIFTS (Figs. 36-48)

The two pendants and 21 reel units made of Sperm whale-ivory were recovered *in situ* within an area some 50 cm square. They are greatly desiccated and in an extremely fragile condition.

The smaller of the two whale-tooth pendants (Fig. 37) which is 9.8 cm in length, features a 2 mm-deep scarf around the margin towards the distal end of the tooth. It is not clear whether this represents a provision for suspension, a stage in levelling the wall prior to drilling holes for suspension (Duff 1956, p. 107) or simply ornamentation. Neither the large pendant (Fig. 36) which is 11.8 cm in length, nor the smaller, bear evidence for perforation across the wall of the root but this may be due to their poor state of preservation. Both specimens are derived from an immature Sperm whale, perhaps up to ten metres in length (A. B. Stephenson, pers. comm.).



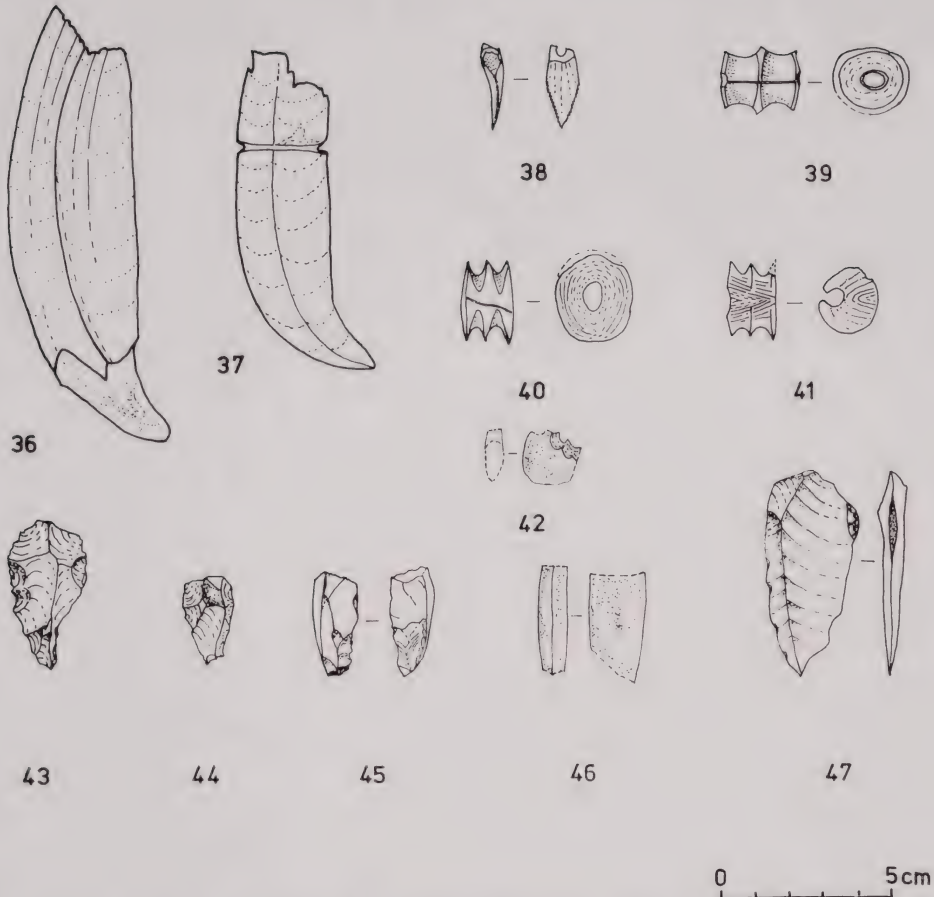
Figs. 3-35. Artifacts recovered from the excavation of N44/97. 3. Flake from polished, black argillite adze, AR 5987. 4-7. Flakes from polished, Tahanga basalt adzes, AR 6020, 6031, & 6055. 8-13. Adze roughouts of Tahanga basalt, AR 6045, 6023 & 6053. 14-16. Sandstone file fragments, AR 6045, 6023 & 6053. 17-25. Siliceous drill points, AR 6065, 6025, 6062, 6060, 6043, 6001 & 6065. 26. Core of moa-bone fish-hook tab, AR 6052. 27-29. Obsidian core tools, AR 6018, 6024 & 6063. 30. Sandstone hoanga, AR 6065. 31-33. Smoothing stones, AR 6028, 5991 & 6040. 34. Awl of Tahanga basalt, AR 6065. 35. Worked pumice cone, AR 6065.

Table 2. Distribution of faunal remains by species and layer.

Distribution Layer	Surface	B1	B2	B4	L18	B1	B4	L20	B1	B2	B2	L18
	Lot 19 1975	I	I	I	I	II	II	[IV	III	II	III	II
Moa crop-stones							2					
Moa (<i>Dinornis</i> sp.)	X					X	X	X	?			?
Bird (unidentified)					X	X	X	X		X		
Dog	X								?			
Seal	X								?			
Human	X					X	X		?			
Fish (unidentified)	X								X	X		
Pipi			?					X				?
Tuatua							2					
<i>Neothais</i>									1	X		
Other gastropods									X			

(X = present)

HAHEI 1976



Figs. 36-47. Surface collection of artifacts (1975) from N44/97. 36-37. Sperm whale-tooth pendants, E47408 & E47417. 38. *Carcharodon* shark-tooth pendant, E47406. 39. Sperm whale-ivory reel Style A, E47409. 40-41. Sperm whale-ivory reels Style B, E47414. 42. Fragment of one-piece fish-hook tab, E47415. 43-45. Siliceous drill points, E47412-3 & E47410. 46. Sandstone file fragment, E47411. 47. Obsidian blade tool, E47418.

The necklaces are composed of ivory reels or beads (an attractive light brown due to discoloration) which have been cut from the short, solid section near the crown of the Sperm whale's tooth. Two distinctive styles are recognisable (see Fig. 48).

Style A is represented by eleven elongated or barrel-shaped units (Fig. 39). These vary in length 19-23 mm and in diameter 15-22 mm at their median flanges. They display remarkable uniformity in both their external proportions and the dimensions of their centrally-drilled perforations (5.5-8 mm). It is by no means clear how reels such as these were manufactured, particularly in their final stages of completion. The precision with which many reels have been made, however, strongly suggests employ-

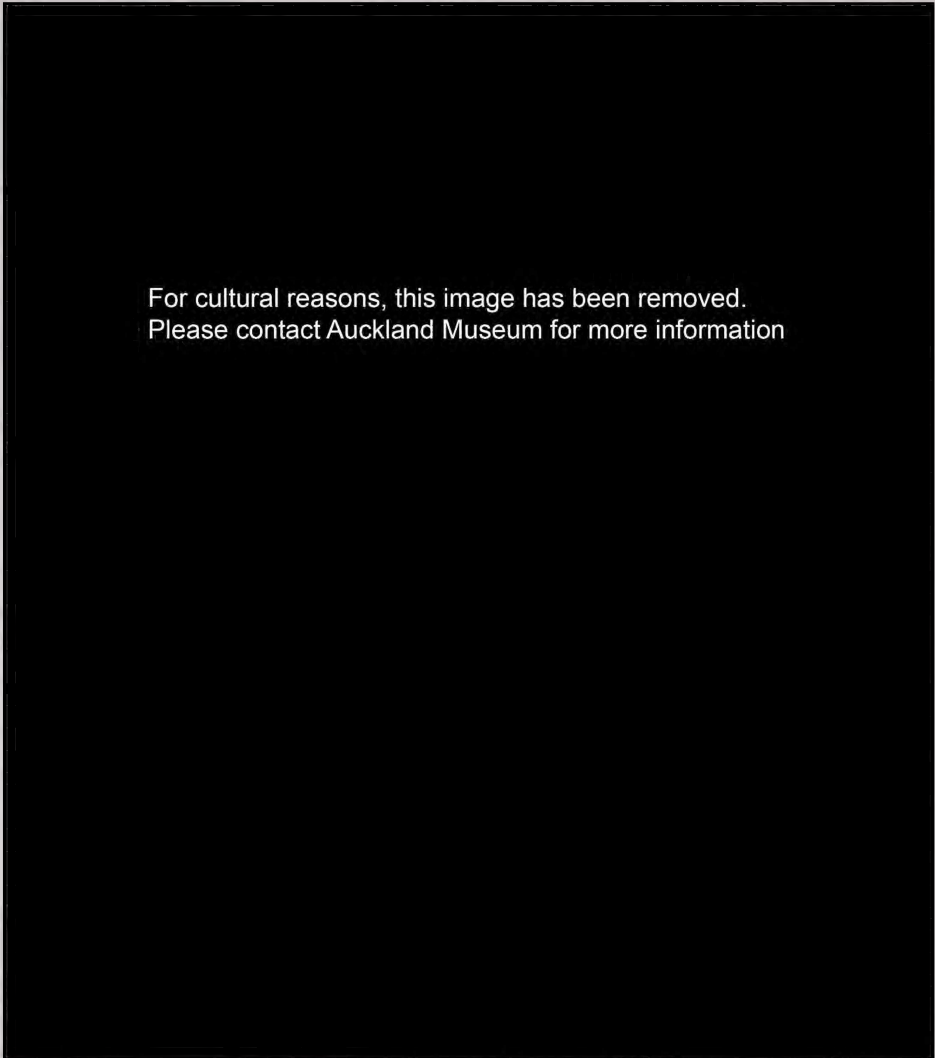


Fig. 48. The Sperm whale-tooth pendants and ivory-reel necklaces recovered from the surface of N44/97, Hahei Beach, Coromandel. (Photo: Vahry Photography).

ment of a lathing principle. Several reels feature longitudinal fissures, but it is believed that these are the result of natural shrinkage through oil loss. The eleven units give a combined dry weight of 46.8 g and, placed end to end, a combined length of 24 cm.

Style B is represented by the shorter necklace comprising ten units (Figs. 40-41). These reels are characterised by pronounced transverse flanges set close together to produce a closed concertina-like effect. Varying in length 13-16 mm and in diameter 21-26 mm at their lateral margins, they possess larger and more irregular perforations (5-14 mm) for suspension. It is of some interest that the smallest reel (Fig. 41) is one of an assumed pair cut from the same section of solid ivory. In so far as it is possible to tell, its "twin" is not employed in this particular necklace. Some of the reels display fissures similar to the Style A examples. The ten units give a combined dry weight of 52.8 g and, placed end to end, a combined length of 13.5 cm.

Dr. Duff's study of the morphology, material of manufacture and distribution of provenanced reels and pendants (1956, Ch. 4) remains a standard text on the subject of archaic ornament typology. Discussion here is confined to observations on the general significance of the three traits which best characterise the Hahei finds. These are the rarity of their numerical occurrence (as opposed to spatial distribution), stylistic affinities with the Wairau Bar grave gifts and the association of whale-ivory reels with Sperm whale-tooth pendants.

Five complete whale-ivory necklaces have been recorded previously from three locations; Mercury Bay (Skinner 1934, p. 106), Wairau Bar burials 1, 32 and 34 (Duff 1956) and the Chathams (Skinner 1943, p. 132). Finds of single whale-ivory reels, occasionally derived from burials (e.g. Wairau Bar burial 3), but more commonly from midden contexts, have been recorded at Opito Bay, Porangahau, Porirua, Wairau Bar, Patiti Point, Waitaki River-mouth, Long Point, Papatowai and the Chathams. The distribution of whale-ivory reels is clearly widespread, but this is not to say that they are common. Indeed, they are known from only some 20-25% of those localities where reels in other media (ivory other than whale, bone, stone and shell) are recorded (Duff 1956, pp. 135-36). Only at Wairau Bar, where whale-ivory reels comprise 43% of the 121 units of ivory, bone, stone and shell, can they be said to occur with a high frequency.

The precise relationships between stylistic conservatism in archaic ornaments and their technology and materials of manufacture have yet to be documented in time and space. In this regard, the Hahei finds are of considerable interest. While the ivory-reel necklaces (10 units) from Mercury Bay (Duff 1956, pl. 18A) and Wairau Bar burial 1 (7 units) share a close morphological affinity (Duff 1956, p. 93), the Hahei Style A reels share a close affinity with the moa-bone reels (11 units) from Wairau Bar burial 2 (Duff 1956, p. 90), and the Hahei Style B reels share a close affinity with the ? human-bone reels (13 units) from Wairau Bar burial 16 (Duff 1956, pl. 10B). Of equal interest is the fact that only Wairau Bar burials 1 and 2 contained Sperm whale-teeth (Duff 1956, pl. 8A & 9A) — the obvious prototype for a range of pendants rendered in bone and stone — perforated for suspension.

It is difficult to regard the close morphological affinities and their associations between the Hahei and Wairau Bar necklaces as a chance occurrence. Meantime, tempting as it may be to argue for a temporal link between these two sites, widely-separated in space, we shall await, with some interest, the results of our samples' C¹⁴ determination.

The single, serrated shark-tooth ornament (Fig. 42) is of interest, for it may well have been worn as an ear-pendant rather than as part of a necklace. It is made from one of the few, waisted teeth found in the central upper-jaw of a mature *Carcharodon* or White Pointer shark. The highly-enamelled tooth, 24 mm in length, features a single, dorsally-drilled hole 3 mm in diameter. The lateral root margins have been worked so as to produce a smooth, angled plane on either side, a practice normally associated with close-fitting necklace units (Duff 1956, p. 130).

Complete *Carcharodon* shark-teeth necklaces have been recovered from burial contexts at Goodwood Beach, Karitane, Wairau Bar (Duff 1956, p. 130) and the

Chathams (Simmons 1962, p. 238). Finds of single teeth and, more rarely, incomplete necklaces have been recovered from middens at Opito (Skinner & Phillips 1953, pp. 172, 185), Horowhenua (Adkin 1948, p. 61), ? Centre Island in the Foveaux Straits (Edge-Partington 1969, pp. 181, 222) besides Wairau Bar and the Chathams. Shell copies of these necklace units, dated to the 13th-14th century A.D., are recorded by Golson (1959, p. 45) from his excavation at Opito Bay. Fossil *Carcharodon* shark-tooth ornaments are also recorded for the Chathams (Nevill 1955, p. 492).

CONCLUSION

The importance of the Hahei finds lies not so much in the rarity of their recorded occurrence, as in their certain association with the well-documented Coromandel aspect of Archaic material culture.

The overburden of recent dune sands, immediately west of Hahei Beach, undoubtedly preserves further valuable evidence for the area's intermittent occupation by the Maori at the earlier end of the New Zealand prehistoric sequence.

This evidence could be destroyed by ribbon development in the near future, particularly at the southern end of Hahei Beach where, within the last few years, six recorded and five un-recorded sites (including two burials) have been seriously disturbed or lost.

Acknowledgements. We wish to thank Mr. and Mrs. J. D. Osborne for their valued interest and generous hospitality; Mr. and Mrs. B. Phillips for permitting us to excavate on their property; the Auckland Institute and Museum for meeting the costs of excavation; Lady Aileen Fox for her encouragement and comment on our initial report; Mr. D. Simmons, Auckland Institute and Museum, for permitting us to publish the grave gifts; Mrs. P. Bond, Mr. K. Spengers and Vahry Photography for reductions and photographs of the illustrations, and Mrs. Ilana Edson for typing this report.

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For cultural reasons, pages 37-56 have been removed.
Please contact Auckland Museum for more information.